

METHOD OF DESIGNING HEAT SEAL WIDTH

BACKGROUND OF THE INVENTION

ABSTRACT

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This invention provides a method of designing a suitable heat seal width resistant to unseal more than conventional heat-sealing, which comprises;

- 10 (1) heat-sealing a test piece of a sheet to be heat-sealed at a temperature lower than fusion temperature of heat seal portion of the sheet,
- (2) heat-sealing another test piece of the sheet at a temperature at or higher than the fusion temperature,
- (3) pulling to peel heat-sealed portion of each test piece,
- 15 and measuring pull strength variation with peel length,
- (4) calculating peel energy in various peel length of the test piece heat-sealed at a temperature lower than fusion temperature of heat seal portion of the sheet by integrating the pull strength variation,
- 20 (5) calculating also peel energy of the test piece heat-sealed at the temperature of or higher than the fusion temperature by integrating the pull strength variation up to rupture at heat-sealed portion, and
- (6) setting heat seal width at a peel length having a peel
- 25 energy higher than the peel energy of the test piece heat-sealed at the temperature of or higher than the fusion temperature.